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10/712,289

11/13/2003

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EXAMINER

SCHNURR, JOHN R

ART UNIT

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2421

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/712,289	<b>Applicant(s)</b> RUSS ET AL.	
	<b>Examiner</b> JOHN SCHNURR	<b>Art Unit</b> 2421	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 16-21, 23, 24, 26 and 27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-21, 23, 24, 26 and 27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This Office Action is in response to the Amendment After Non-Final Rejection filed 12/29/2009. Claims 16-21, 23, 24, 26 and 27 are pending and have been examined.

2. The information disclosure statements (IDS) submitted on 11/11/2009 and 02/10/2010 were considered by the examiner.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 16-21, 23, 24, 26 and 27 have been considered but are moot in view of the new ground(s) of rejection.

4. Although a new grounds of rejection has been used a response to applicant's arguments regarding the newly added limitation "wherein the second receiving device has access to all of the hardware and software functionality of the first receiving device" is considered necessary since previously cited reference Naden (WO 01/56297) will be used to meet this limitation. Naden discloses a home network system composed of a master set top box (MSTB) and a plurality of slave set top boxes (SSTB). The MSTB has access to interactive television, the Internet and a video memory system. The SSTBs act as wireless terminals to the MSTB and thus have access to the same services and resources as the MSTB. See page 3 lines 2-7 of Naden.

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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6. Claims 16-21, 23, 24, 26 and 27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The newly added limitation “a processor configured to receive notifications identifying unused frequencies, wherein the unused frequencies are identified from a frequency map provided by a service provider” is not supported by the original disclosure. Applicant indicates this limitation is taught by paragraphs [0017] and [0020]. However, the only portion of applicant's disclosure referring to a “frequency map” is as follows from paragraph [0020]:

Alternatively, in another preferred embodiment, the predetermined frequency can be set to an unused frequency in the service provider's frequency map in order to ensure that the networked signals do not conflict with the downstream signals provided by the satellite transponder, or it can be at the same frequency if treated as a different polarization.

This passage merely states that the predetermined frequency is set to a frequency not used by the service provider. There is no disclosure of a frequency map being *provided* to any device by a service provider as required by the claims.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims **16-21, 23, 24, 26 and 27** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Naden (WO 01/56297)** in view of **Kliger et al. (US 2004/0177381)**, herein Kliger, in view of **Williams (US 6,493,873)** further in view of **Borseth (US 7,042,526)**.

Consider **claim 16**, Naden clearly teaches a networked system, comprising:

a switch configured to receive multimedia signals originating from a remote source; **(Fig. 2: RF switch 202 receives multimedia signals from satellite receivers, pg. 6 lines 26-27.)**

a first receiving device configured to control the switch to selectively receive at least a portion of the multimedia signals from the switch, the first receiving device being configured to process received multimedia signals to generate output signals for presentation on a first local device, **(Fig. 2: Local set interface 216 controls the output of switch 202, pg. 7 lines 1-11.)** the first receiving device comprising a storage device configured to selectively store multimedia signals received from the switch, **((Fig. 4: Video memory system 402 is disposed in master set top box 110', pg. 11 line 22 to pg. 12 line 25.)**

a second receiving device configured to directly control the switch to selectively receive via the switch at least a portion of the multimedia signals originating from a remote source **(Fig. 2: Slave set top boxes 116 controls the output of switch 202, pg. 7 lines 1-11.)** and to selectively receive at least a portion of the stored multimedia signals from the first receiving device, the second receiving device being configured to process received multimedia signals to generate output signals for presentation on a second local device, **(Fig. 4: Video memory system 402 is disposed in master set top box 110' and provides recorded video to the slave set top boxes upon request, pg. 11 line 22 to pg. 12 line 25.)** wherein the second receiving device has access to all of the hardware and software functionality of the first receiving device. **(pg. 3 lines 2-7)**

Naden further teaches modulating stored multimedia signals prior to distribution over the network (pg. 9 lines 7-17 and pg. 11 lines 22-25). However, Naden does not explicitly teach the first receiving device supplying modulated stored multimedia signals to the second receiving device via the switch.

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In an analogous art, Kliger, which discloses a local multimedia network, clearly teaches the first receiving device supplying modulated stored multimedia signals to the second receiving device via a network entry point. **(Fig. 2: Home media server 24 provides modulated recoded multimedia to thin clients 28 via splitter 14, [0020]-[0023].)**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Naden by transmitting modulated stored multimedia signals from the first receiving device to the second receiving device via the switch, as taught by Kliger, for the benefit of providing stored multimedia signals to legacy set top boxes ([0020] Kliger).

However, Naden and Kliger do not explicitly teach a processor configured to receive notifications identifying unused frequencies and modulate multimedia signals to the unused frequencies.

In an analogous art, Williams, which discloses a local multimedia network, clearly teaches a processor configured to receive notifications identifying unused frequencies and modulate multimedia signals to the unused frequencies. **(Fig. 3: Transmodulator control unit determines unused frequencies and instructs the upconverters 62 and 66 to convert the multimedia signals to the unused frequencies, col. 11 line 22 to col. 12 line 15.)**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Naden and Kliger by storing unused frequency information and transmitting media signals in the unused frequencies, as taught by Williams, for the benefit of more efficiently utilizing the available bandwidth.

However, Williams does not explicitly teach wherein the unused frequencies are identified from a frequency map provided by a service provider.

In an analogous art, Borseth, which discloses a video distribution system, clearly teaches a frequency map being provided to a client which shows the used and unused portions of the spectrum. **(Fig. 5 col. 7 lines 27-35)**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Naden, Kliger and Williams by receiving a frequency map, as taught by Borseth, for the benefit of reducing the amount of processing required to determine the unused frequencies.

Consider **claim 17**, Naden combined with Kliger and Williams, as in claim 16, clearly teaches the remote source is a satellite. **(pg. 4 lines 14-23 Naden)**

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Consider **claim 18**, Naden combined with Kliger and Williams, as in claim 16, clearly teaches the first receiving device is a digital home communications system (DHCT). **(Fig. 2 MSTB 110 Naden)**

Consider **claim 19**, Naden combined with Kliger and Williams, as in claim 16, clearly teaches the second receiving device is one of a plurality of second receiving devices, **(Fig. 1 SSTBs 116 Naden)** each configured to control the switch to selectively receive via the switch multimedia signals from the remote source **(Fig. 2: SSTBs 116 control the output of switch 202, pg. 7 lines 1-11 Naden.)** and to selectively receive via the switch **(Fig. 2: Home media server 24 provides recoded multimedia to thin clients 28 via splitter 14, [0020] Kliger.)** stored multimedia signals from the first receiving device. **(Fig. 4: Video memory system 402 is disposed in master set top box 110' and provides recorded video to the slave set top boxes upon request, pg. 11 line 22 to pg. 12 line 25 Naden.)**

Consider **claim 20**, Naden combined with Kliger and Williams, as in claim 16, clearly teaches the second receiving device is a digital home communications system (DHCT). **(Fig. 3 SSTB 116 Naden)**

Consider **claim 21**, Naden combined with Kliger and Williams, as in claim 16, clearly teaches the switch routes multimedia signals based on at least one of polarization and frequency of the multimedia signals, **(pg. 7 lines 4-11 Naden)** wherein the first receiving device supplies the stored multimedia signals to the switch with a polarization or frequency that is different from a polarization or frequency of the multimedia signals from the remote source. **(Fig. 5: Signals from VMS 402 are sent through wireless protocol converter 212 and base station transceiver 214 where they are modulated, pg. 9 lines 7-17 and pg. 11 lines 22-25 Naden.)**

Consider **claim 23**, Naden clearly teaches a satellite communications system for transmitting downstream satellite signals from a satellite transponder to a satellite receiver, the satellite signals being transmitted with a plurality of frequencies and polarizations, the system comprising:

a satellite receiver configured to receive the downstream satellite signals; **(Fig. 1: Dish antennas 102-1 to 102-N receive satellite signals, pg. 4 lines 14-23.)**

a switch configured to route the downstream satellite signals according to frequency and polarization; **(Fig. 2: RF switch 202 receives multimedia signals from satellite receivers, pg. 6 lines 26-27. Signals are**

**selected based on polarization and frequency, pg. 5 lines 2-7 and pg. 7 lines 4-11.)**

a first digital home communications system (DHCT) comprising a modulator, the first DHCT being coupled to the switch and configured to process a portion of the downstream satellite signals in accordance with a tuned frequency and polarization, and configured to store and subsequently transmit requested presentations included in the downstream satellite signals, **(Fig. 4: Video memory system 402 is disposed in master set top box 110' and provides modulated recorded video to the slave set top boxes upon request, pg. 9 lines 7-17 and pg. 11 line 22 to pg. 12 line 25.)**

a second DHCT coupled to the switch and configured to process a portion of the downstream satellite signals in accordance with a tuned frequency and polarization, and configured to receive the requested presentations from the first DHCT, **(Fig. 4: Video memory system 402 is disposed in master set top box 110' and provides recorded video to the slave set top boxes upon request, pg. 11 line 22 to pg. 12 line 25.)** wherein the second receiving device has access to all of the hardware and software functionality of the first receiving device. **(pg. 3 lines 2-7)**

However, Naden does not explicitly teach the first receiving device supplying the modulated stored multimedia signals to the second receiving device via the switch.

In an analogous art, Kliger, which discloses a local multimedia network, clearly teaches the first receiving device supplying the modulated stored multimedia signals to the second receiving device via a network entry point. **(Fig. 2: Home media server 24 provides recoded multimedia to thin clients 28 via splitter 14, [0020]-[0023].)**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Naden by transmitting the modulated stored multimedia signals from the first receiving device to the second receiving device via the switch, as taught by Kliger, for the benefit of providing stored multimedia signals to legacy set top boxes ([0020] Kliger).

However, Naden and Kliger do not explicitly teach a processor configured to receive notifications identifying unused frequencies and modulate multimedia signals to the unused frequencies.

In an analogous art, Williams, which discloses a local multimedia network, clearly teaches a processor configured to receive notifications identifying unused



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frequencies and modulate multimedia signals to the unused frequencies. **(Fig. 3: Transmodulator control unit determines unused frequencies and instructs the upconverters 62 and 66 to convert the multimedia signals to the unused frequencies, col. 11 line 22 to col. 12 line 15.)**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Naden and Kliger by storing unused frequency information and transmitting media signals in the unused frequencies, as taught by Williams, for the benefit of more efficiently utilizing the available bandwidth.

However, Williams does not explicitly teach wherein the unused frequencies are identified from a frequency map provided by a service provider.

In an analogous art, Borseth, which discloses a video distribution system, clearly teaches a frequency map being provided to a client which shows the used and unused portions of the spectrum. **(Fig. 5 col. 7 lines 27-35)**

Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to modify the system of Naden, Kliger and Williams by receiving a frequency map, as taught by Borseth, for the benefit of reducing the amount of processing required to determine the unused frequencies.

Consider **claim 24**, Naden combined with Kliger and Williams, as in claim 23, clearly teaches the received satellite signals and requested presentations are received and transmitted over a common port. **(pg. 9 lines 4-6 Naden)**

Consider **claim 26**, see claim 16.

Consider **claim 27**, see claim 21.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN SCHNURR whose telephone number is (571)270-1458. The examiner can normally be reached on M-F 9a-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John W. Miller/  
Supervisory Patent Examiner, Art Unit 2421

JRS